Penultimate Solar Cell

AM1 Efficiency
Theoretical: 40%

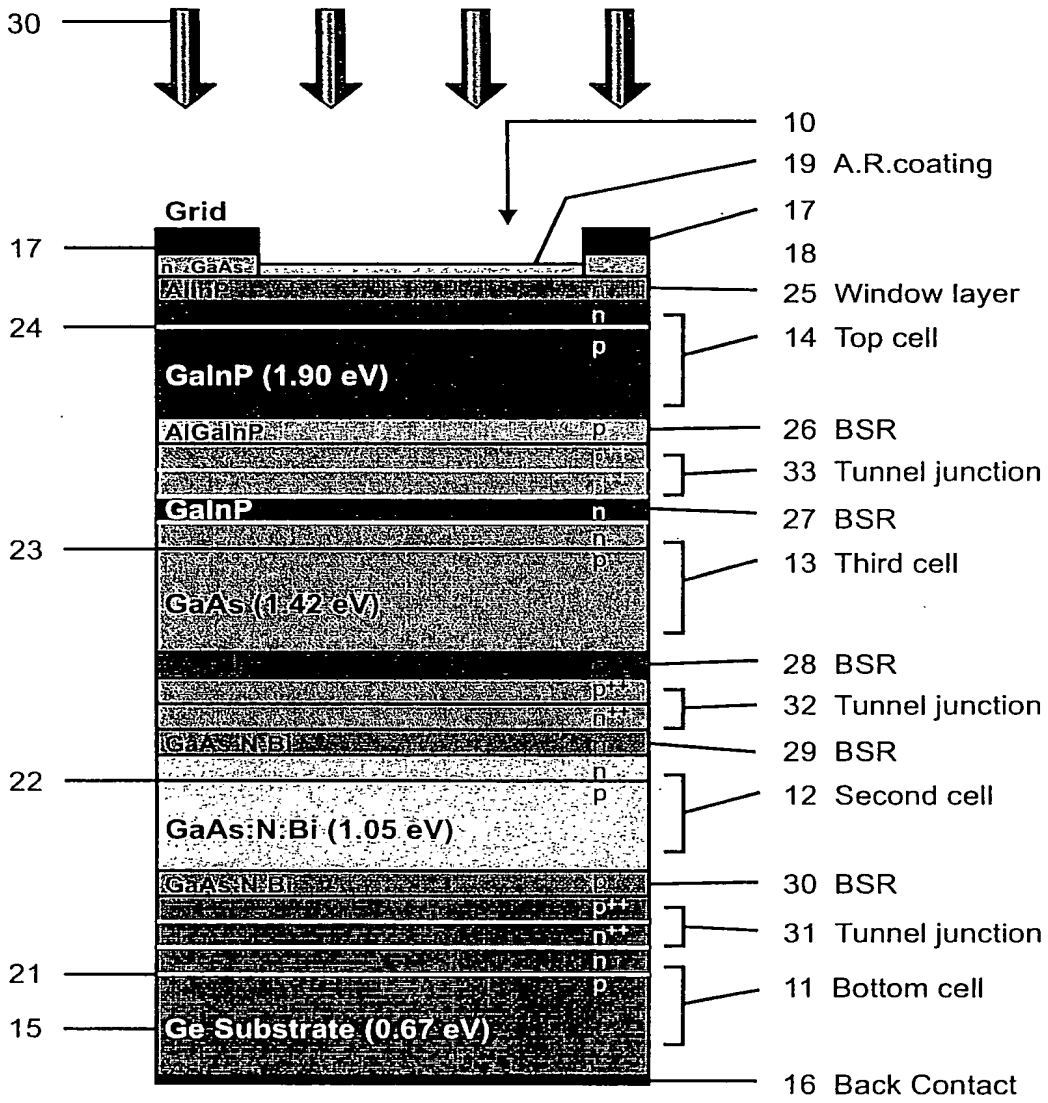

FIG. 1

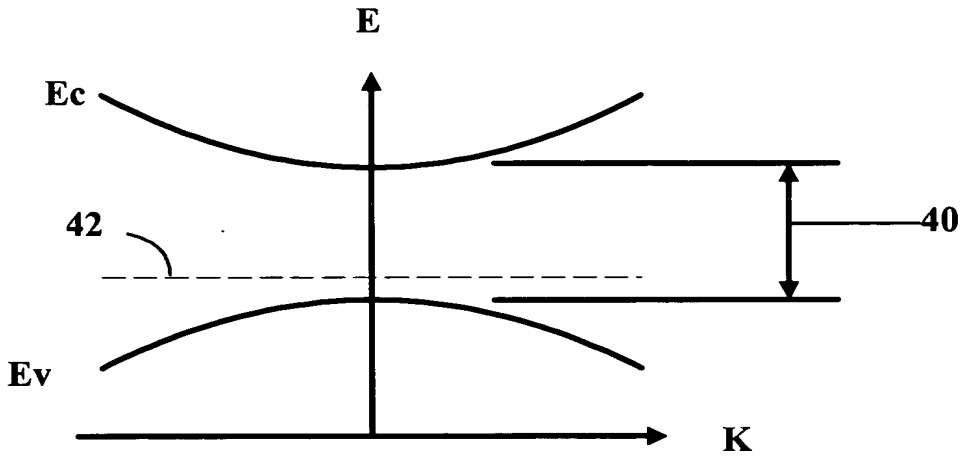

Figure 2 (Prior Art)

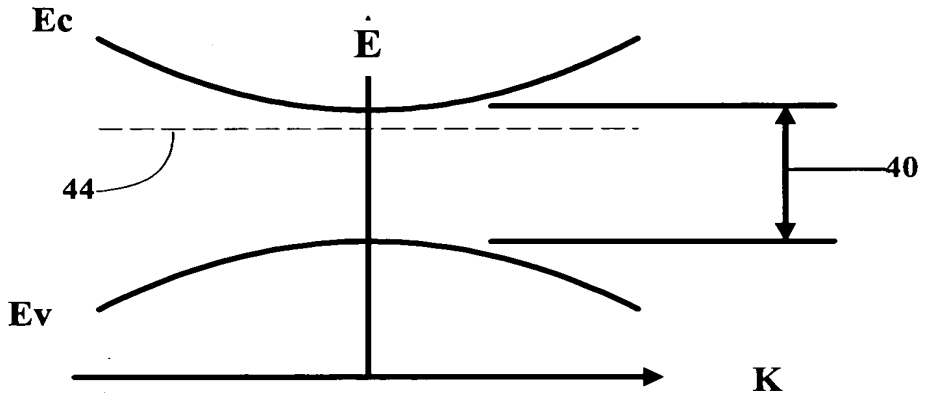

Figure 3 (Prior Art)

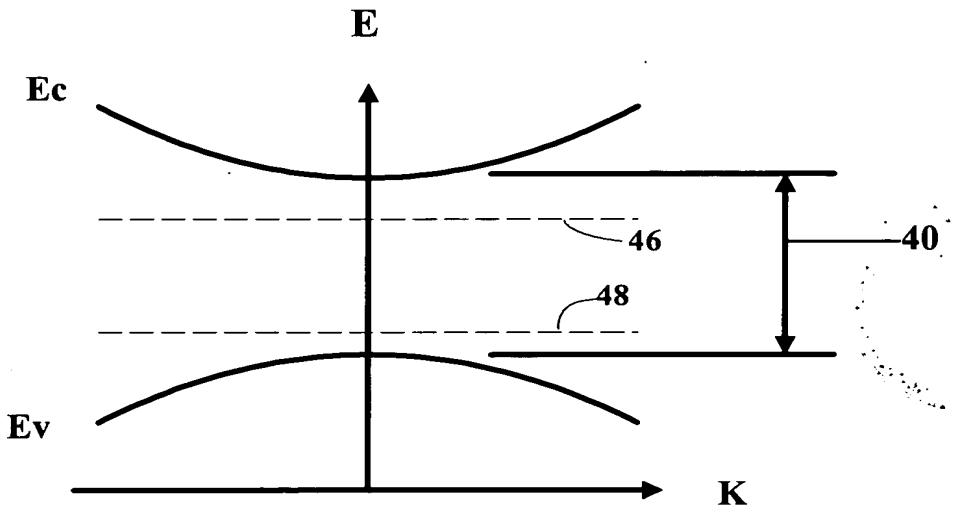

Figure 4

Ultimate Solar Cells

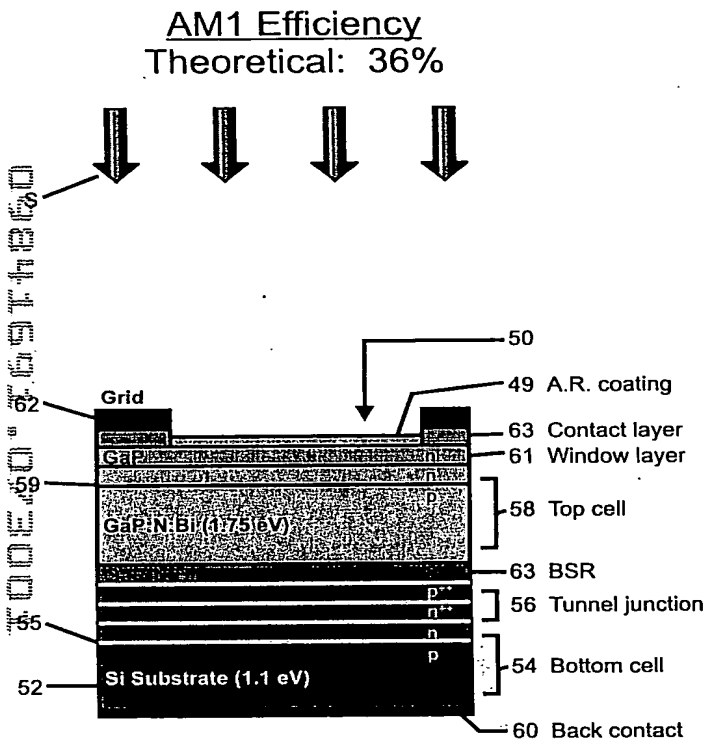

FIG. 5

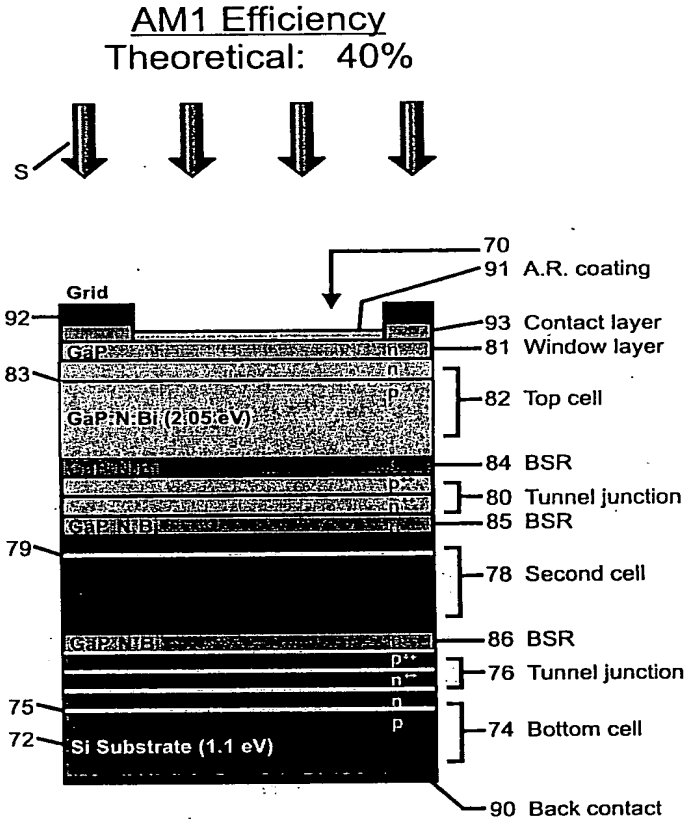

FIG. 6

GaAs-based Edge-Emitting Lasers

1.55 or 1.3 μm wavelength

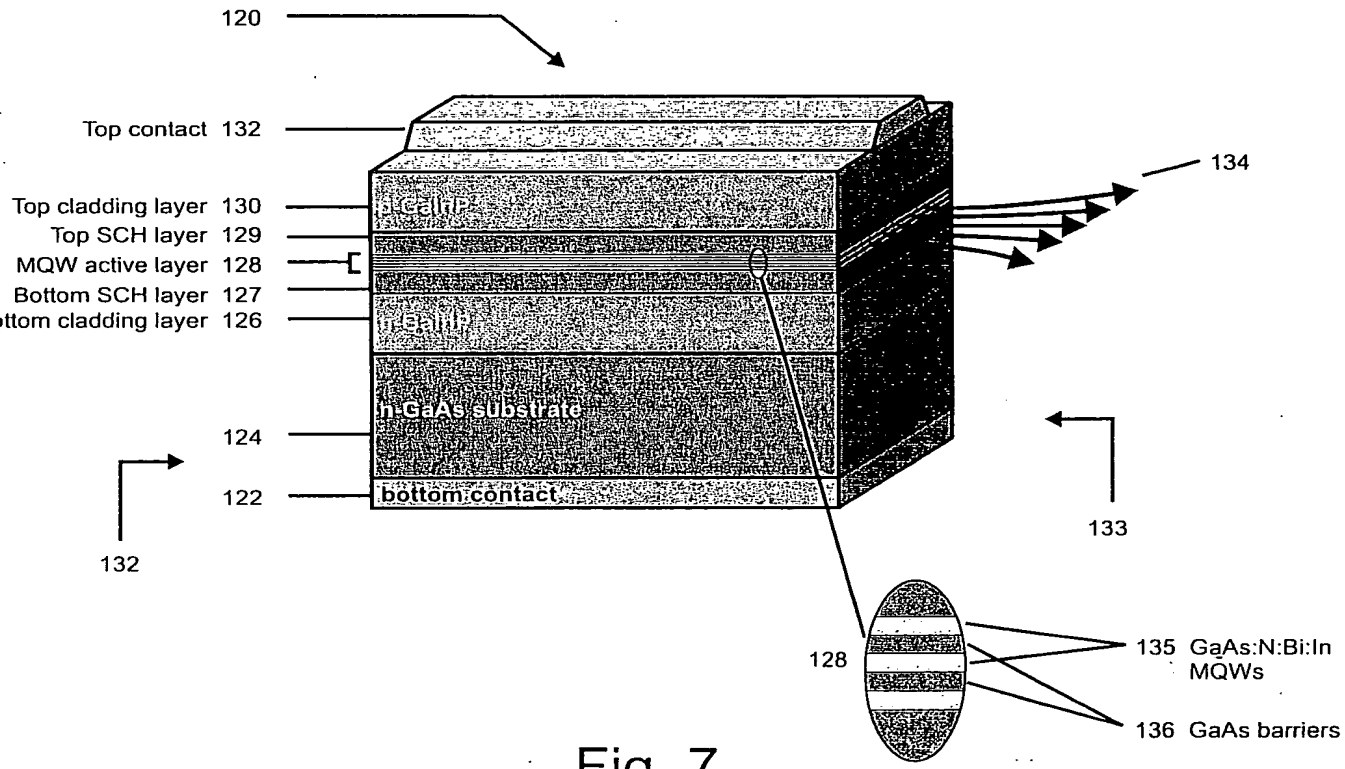

Fig. 7

VCSEL
Lasers for 1.3 or 1.55 μm

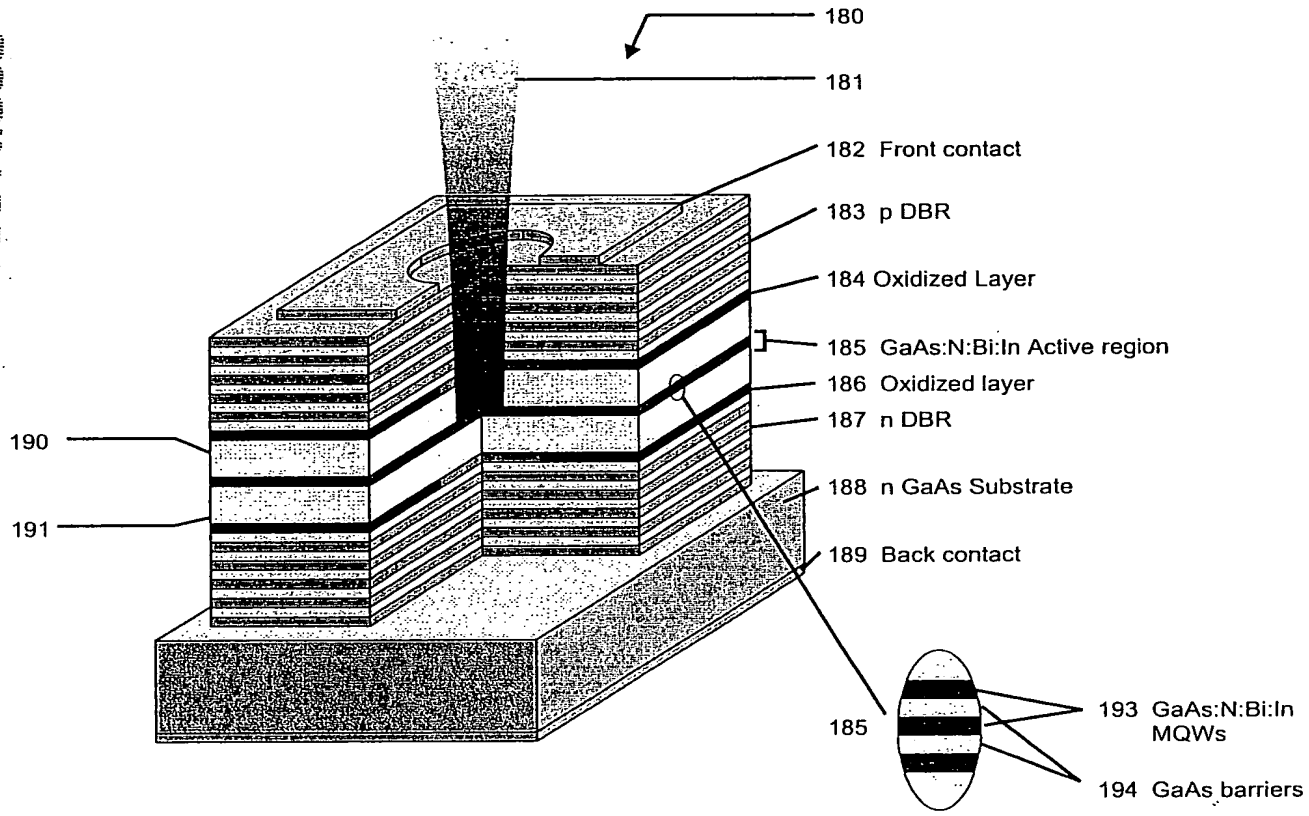

Fig. 8

High Brightness LEDs

Red / NIR LEDs: 640-800 nm

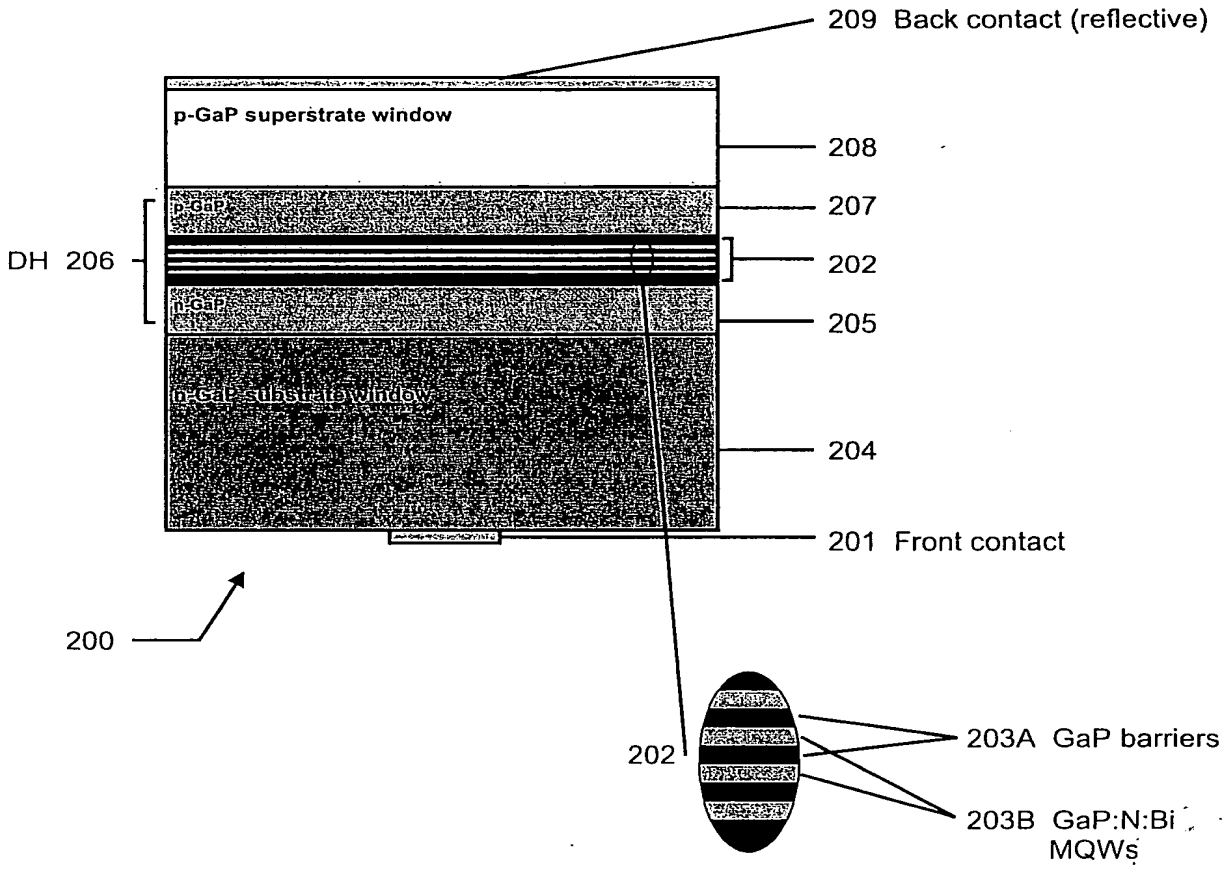

Fig. 9

Silicon monolithic LEDs

Red / NIR LEDs: 640-800 nm

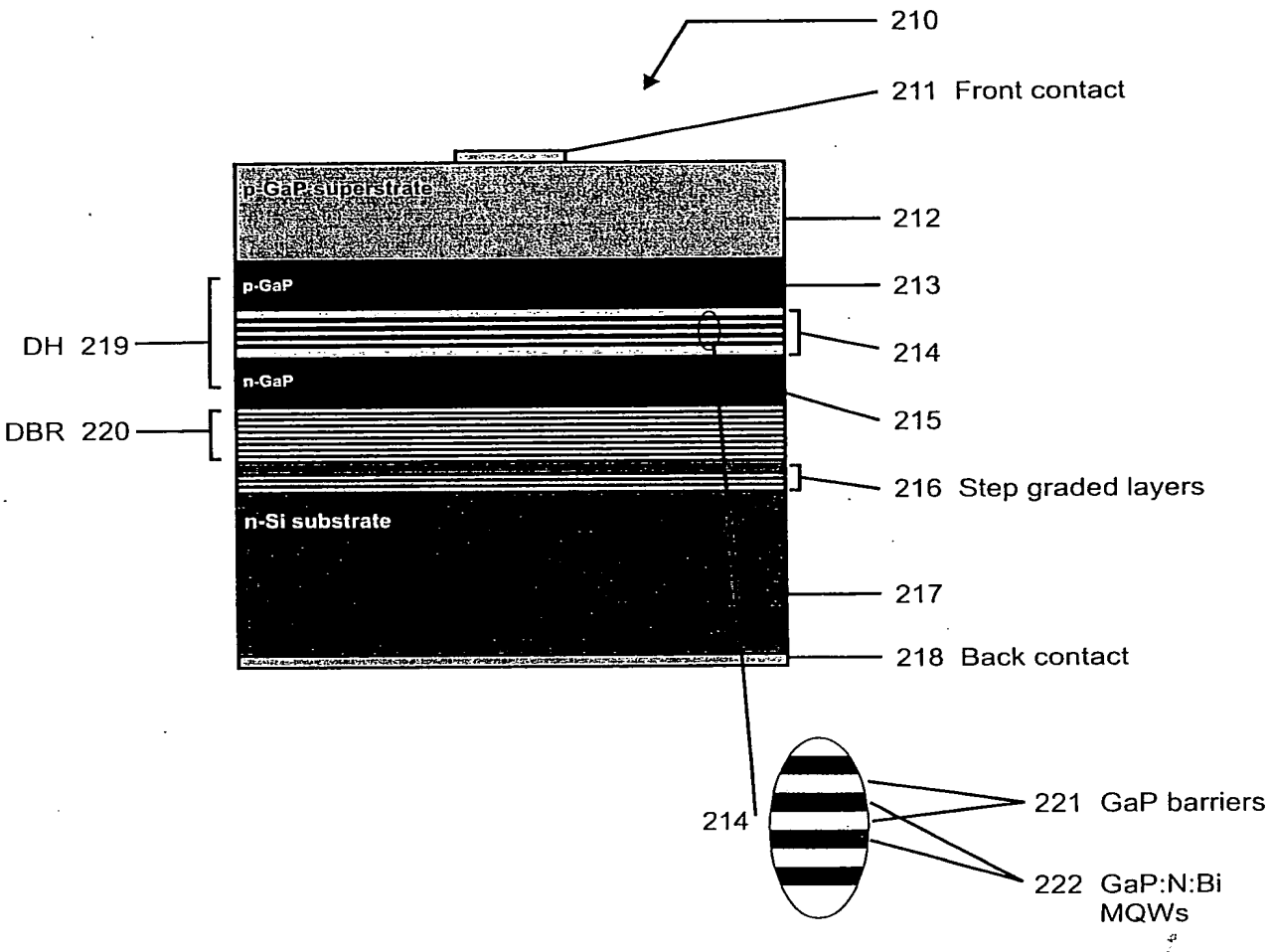

Fig. 10

GaP based Edge-Emitting Lasers

640 - 800 nm wavelength

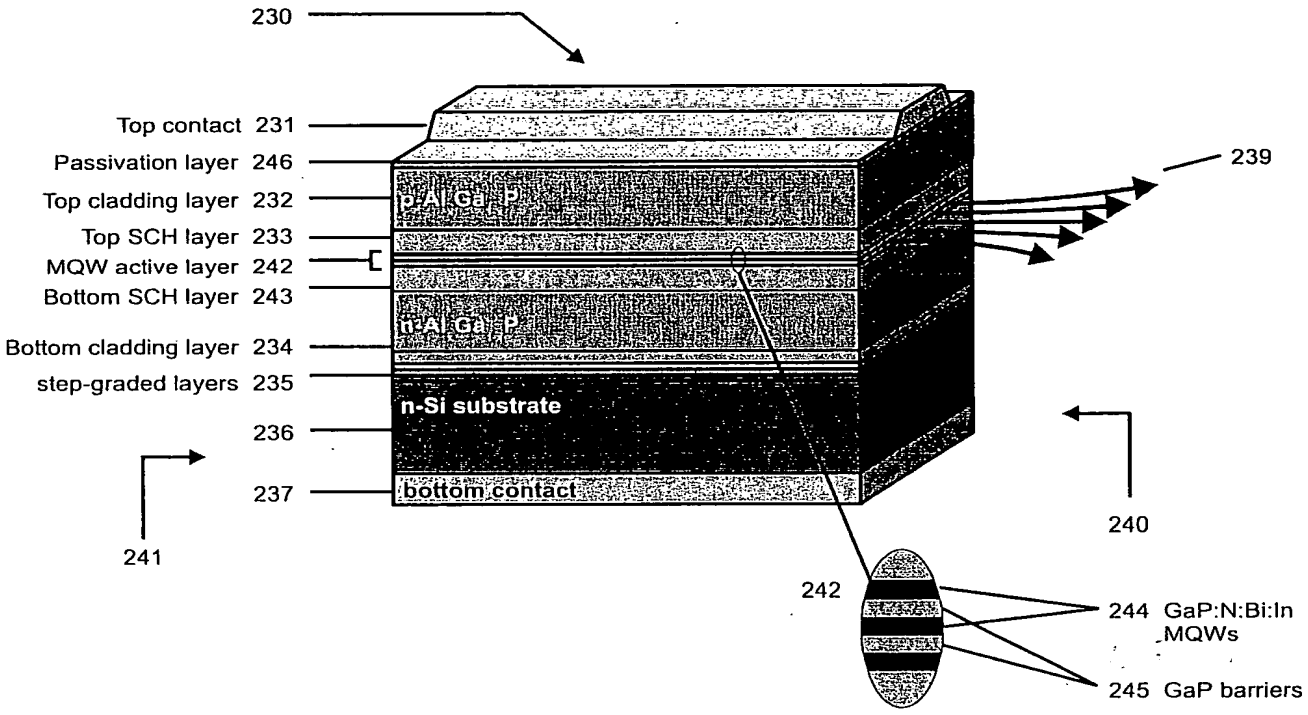

Fig. 11

Thermo Photovoltaic Solar Cell

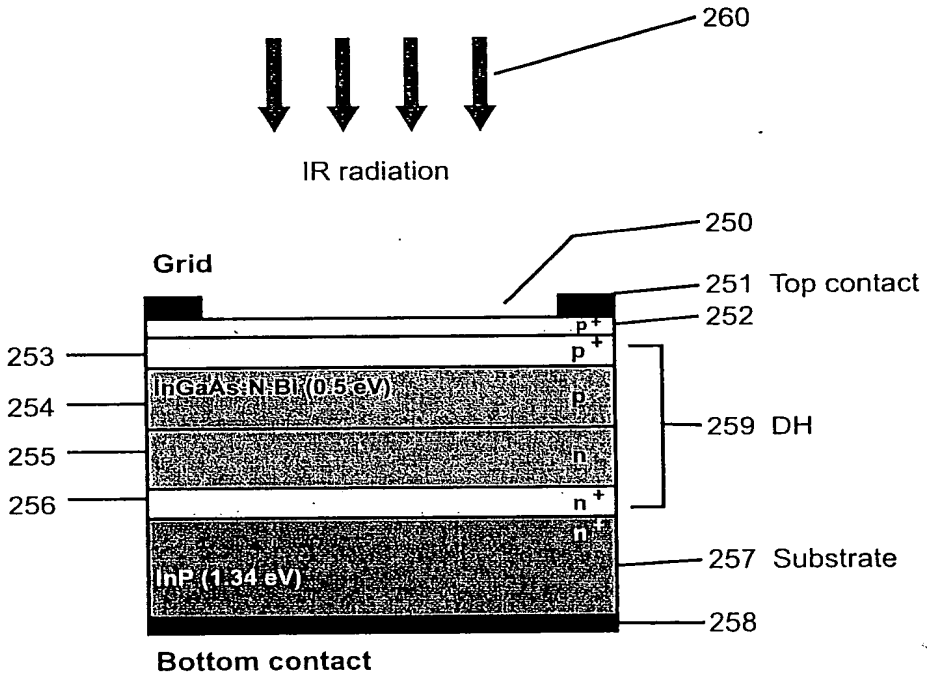

Fig. 12

Photodetectors
for 1.3 or 1.55 μm wavelengths

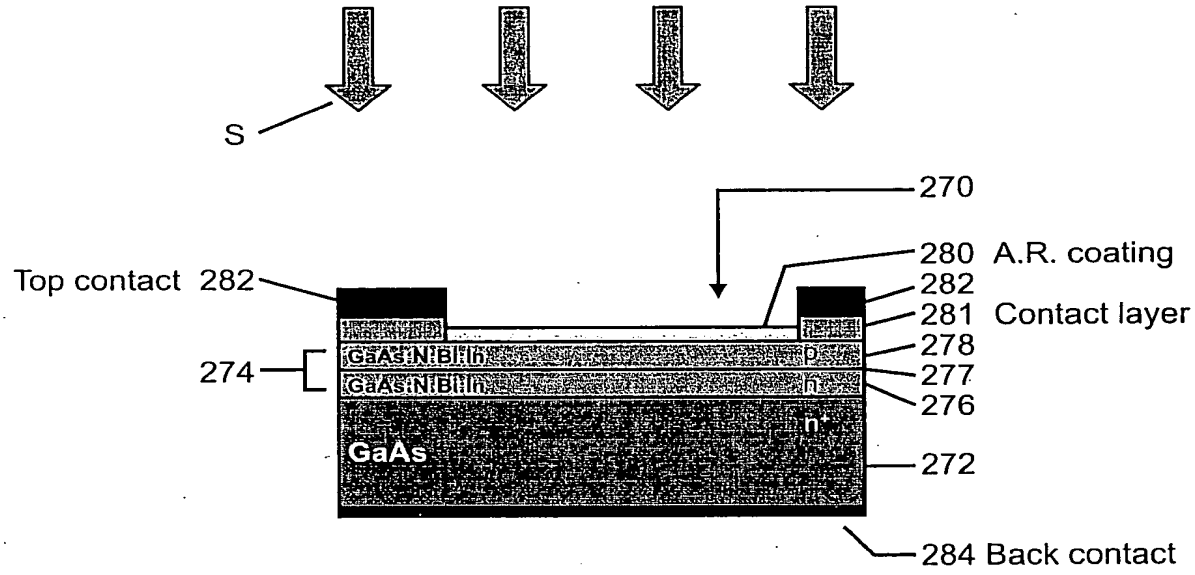

Fig. 13